CLAIMS

We claim:

1. An intervertebral spacer device comprising:

first and second plate members, each having first and second plate surfaces thereof, said plate members being disposed in a spaced apart relationship such that said first plate surfaces oppose one another, and said second plate surfaces face in opposite directions; and

at least one subassembly disposed between said first plate surfaces of said first and second plate members, and disposed such that at least a portion of a compressive load applied to said second plate surfaces of said plate members is transmitted to said at least one subassembly,

said subassembly including a ball captured in a curvate volume, at least a portion of said curvate volume being formed in a convex element that is maintained against said first plate member by a retaining wall and a retaining ring,

the retaining ring being circumferentially adjacent a large end of said convex element, the retaining wall being on the first plate member and engaged with the retaining ring to hold said convex element against said first plate member,

said subassembly establishing a center of rotation between said first and second plate members and about which said first and second plate members rotate relative to one another.

- 2. The device as set forth in claim 1, wherein said subassembly is a restoring force providing subassembly and is disposed between said first plate surfaces such that said portion of said compressive load is counteracted by said restoring force providing subassembly.
- 3. The device as set forth in claim 2, wherein said restoring force providing subassembly includes said convex element, and said convex element is a belleville washer.
- 4. The device as set forth in claim 1, wherein said subassembly further includes a post structure extending from said second plate member, and which post structure includes said ball.

5. The device as set forth in claim 4, wherein said post structure further includes a threaded bore that extends axially from said ball toward said second plate member, and which bore receives therein a threaded set screw such that prior to insertion of the set screw therein, said bore permits the ball to compress radially inwardly, and such that after the insertion of said set screw said ball is not readily radially compressible.